



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

PIEDMONT REGIONAL OFFICE

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Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Michael P. Murphy
Regional Director

May 18, 2016

Mr. David Craymer
Vice President – F & H System Operations
Virginia Electric & Power Company
Dominion – Hopewell Power Station
5000 Dominion Boulevard
Glen Allen, Virginia 23060

Location: Hopewell / City
Registration No: 51019
County-Plant Identification No: 670-00063

Dear Mr. Craymer,

Attached is an administrative amendment to the Article 3 permit to operate your facility pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution. This permit incorporates provisions from the prevention of significant deterioration (PSD) permit dated April 28, 2015.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all conditions carefully.

This approval to operate does not relieve Dominion Resources Services Inc. of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.


Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

Mr. David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please contact Mr. Dick Stone, the Air Permit Writer at (804) 527-5088 or the Piedmont Regional Office at (804) 527 5020.

Sincerely,



Kyle Ivar Winter, P.E.
Deputy Regional Director

KIW/JEK/ROS/510190516.T5.admin.amend

Attachments: Permit
 Phase II Renewal Acid Rain Permit Application
 Title V Report Forms
 NSPS, Subpart Db
 NSPS, Subpart IIII
 MACT, Subpart ZZZZ
 ACG-001 Guidance for Use of a Diluent
 Source Testing Report Format

cc: Director, OAPP (electronic file submission)
 Manager, Data Analysis (electronic file submission)
 Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III
 Manager/Inspector, Air Compliance



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Article 3 Federal Operating Permit

This permit amendment is based upon Federal Clean Air Act acid rain permitting requirements of Title IV, federal operating permit requirements of Title V; and Chapter 80, Article 3 and Chapter 140 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10 1, Chapter 13: 10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, 9 VAC 5-80-360 through 9 VAC 5-80-700, and 9 VAC 5-140-1010 et seq., 9 VAC 5-140-2010 et seq., 9 VAC 5-140-3010 et seq. of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Virginia Electric & Power Company
Facility Name:	Hopewell Power Station
Facility Location:	107 Rev. CW Harris Senior Street Hopewell, Virginia 23860
Registration Number:	
Permit Number:	51019 PRO-51019


This permit includes the following programs:

- Federally Enforceable Requirements - Clean Air Act (Sections I through X)
- State Only Enforceable Requirements (Section XI)
- Federally Enforceable Requirements – Cross-State Air Pollution Control Rule, CSAPR Requirements (Section XII)
- Federally Enforceable Requirements – Phase II Acid Rain Permit (Appendix A)

May 25, 2012
Effective Date

May 18, 2016
Amended Date

December 31, 2016
Expiration Date



Kyle Iyar Winter, P.E.
Deputy Regional Director

May 18, 2016
Signature Date

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I. Facility Information

Permittee

Virginia Electric & Power Company
5000 Dominion Boulevard
Glen Allen, Virginia 23060

Responsible Official

Carlos Brown
Dominion Hopewell Power Station Director

Acid Rain Designated Representative

David Craymer
Vice President – F & H Systems Operations
USEPA ATS-AAR ID Number 607952

Facility

Hopewell Power Station
107 Rev. CW Harris Senior Street
Hopewell, Virginia 23860

Contact Person

Paula Hamel
Director, Generation Environmental Services
(804) 273-3024

County Plant Identification Number: 670-00063

ORIS Code: 10771

NATS Facility Identification Number: 010771000001

Facility Description: NAICS Code 221117 (SIC Code 4911) The Dominion Hopewell Power Station (HPS) is an electric generating facility that operates two primary biomass-fired spreader stoker Babcox and Wilcox (B & W) boilers each rated at 394 mmBTU/hr (maximum capacity) and associated fuel, ash and lime handling systems. Each primary boiler has the potential to operate 8,400 hours per year.

II. Emission Units
 Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment							
001	001	One (1) B & W single drum, single pass stoker boiler that includes an overfire air (OFA) system for electricity generation (boiler biomass; burner natural gas)	394 x 10 ⁶ BTU/hr firing biomass (maximum); 379 x 10 ⁶ BTU/hr firing biomass (nominal)	1) Selective Non-catalytic Reduction System (SNCR) Ammonia injection installed 1990; 2) Dry Lime Scrubber installed 1990; 3) Fabric Filter Baghouse installed 1990	1) 001/ EC-1a, 2) 001/ EC-1b; 3) 001/ EC-1c;	1) NO _x (40% design control efficiency); 2) SO ₂ (75% design control efficiency); 3) PM, PM-10, PM-2.5 (99.9% design control efficiency)	PSD permit issued 04/28/2015

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
002	001	One (1) B & W single drum, single pass stoker boiler that includes an overfire air (OFA) system for electricity generation (boiler - biomass; burner - natural gas)	394 x 10 ⁶ BTU/hr firing biomass (maximum); 379 x 10 ⁶ BTU/hr firing biomass (nominal)	1) Selective Non-catalytic Reduction System (SNCR) Ammonia injection installed 1990; 2) Dry Lime Scrubber installed 1990; 3) Fabric Filter Baghouse Installed 1990	1) 002/ EC- 2a; 2) 002/ EC- 2b; 3) 002/ EC- 2c;	1) NO _x (40% design control efficiency); 2) SO ₂ (75% design control efficiency); 3) PM, PM-10, PM-2.5 (99.9% design control efficiency)	PSD permit issued 4/28/2015
007	007	One (1) emergency diesel feed water pump (combusts diesel fuel)	1.2 x 10 ⁶ BTU/hr; 126 BHP	None	N/A	N/A	PSD permit issued 4/28/2015
020	020	One (1) emergency diesel fire water pump (combusts diesel fuel)	1.63 x 10 ⁶ BTU/hr; 238 BHP	None	N/A	N/A	PSD permit issued 4/28/2015

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Process Equipment – Bed and Flyash Handling System and Lime Handling System Storage							
010	N/A	One (1) Boiler Ash Conveyor Blower Systems A	28 tons/hr	Fabric Filter Baghouse	EC-10	PM, PM-10, PM 2.5 (99% design control efficiency)	PSD permit issued 4/28/2015
012	N/A	One (1) Boiler Ash Conveyor Blower Systems B	28 tons/hr	Fabric Filter Baghouse	C-11	PM, PM-10, PM 2.5 (99% design control efficiency)	PSD permit issued 4/28/2015
013	N/A	One (1) Boiler Ash Conveyor Blower Systems C	28 tons/hr	Fabric Filter Baghouse	EC-12	PM, PM-10, PM 2.5 (99% design control efficiency)	PSD permit issued 4/28/2015
014	014	One (1) Ash Unloading Feeder	80 tons/hr	Ash Conditioning System (water spray)	EC-14	PM, PM-10, PM 2.5	PSD permit issued 4/28/2015
015	015	One (1) Recycle Ash Bin	26.5 tons	Bin Vent Filter	EC-15	PM, PM-10, PM 2.5	PSD permit issued 4/28/2015
016	016	One (1) Ash Storage Silo	530 tons	Bin Vent Filter	EC-16	PM, PM-10, PM 2.5	PSD permit issued 4/28/2015
017	017	One (1) Pebble Lime Storage Silo	135 tons	Bin Vent Filter	EC-17	PM, PM-10, PM 2.5	PSD permit issued 4/28/2015

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
018	018	One (1) Biomass Storage Silo (former coal silo)	180 tons	Bin Vent Filter	EC-18	PM, PM-10, PM 2.5	PSD permit issued 4/28/2015
019	019	Parts Washer	Various	NA	NA	VOC	NA
Process Equipment – Biomass Handling System							
101 A	NA	Biomass Truck Tipper (1) to Receiving Hopper (1)	269 tons	Partial Enclosure	NA	PM, PM-10, PM 2.5	PSD permit issued 4/28/2015
101 B	NA	Biomass Truck Tipper (1) to Receiving Hopper (1)	269 tons	Partial Enclosure	NA	PM, PM-10, PM 2.5	PSD permit issued 4/28/2015
101 C	NA	One (1) Emergency Reclaimer	90 tons/hr	NA	NA	PM, PM-10, PM 2.5	PSD permit issued 4/28/2015
102	NA	One (1) Biomass Storage Pile	3 MMCF	NA	NA	PM, PM-10, PM 2.5	PSD permit issued 4/28/2015
103	NA	Biomass Stackers	269 tons/hr	NA	NA	PM, PM-10, PM 2.5	PSD permit issued 4/28/2015
104-1	NA	Truck Tipper Reclaimer # 1 to Conveyor A Transfer Point	269 tons/hr	Partial Enclosure	NA	PM, PM-10, PM 2.5	PSD permit issued 4/28/2015
104-2	NA	Truck Tipper Reclaimer # 2 to Conveyor A Transfer Point	269 tons/hr	Partial Enclosure	NA	PM, PM-10, PM 2.5	PSD permit issued 4/28/2015

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
104-3	NA	Conveyor B To Diverter Gate #2 Transfer Point	269 tons/hr	Partial Enclosure	NA	PM, PM-10, PM 2.5	PSD permit issued 4/28/2015
104-4	NA	Conveyor C to Stacker Transfer Point	269 tons/hr	Partial Enclosure	NA	PM, PM-10, PM 2.5	PSD permit issued 4/28/2015
104-5	NA	Reclaimer to Conveyor D Transfer Point	90 tons/hr	Partial Enclosure	NA	PM, PM-10, PM 2.5	PSD permit issued 4/28/2015
104-6	NA	Emergency Reclaimer To Conveyor D Transfer Point	90 tons/hr	Partial Enclosure	NA	PM, PM-10, PM 2.5	PSD permit issued 4/28/2015
104-7	NA	Diverter Gate # 2 To Conveyor D Transfer Point	90 tons/hr	Partial Enclosure	NA	PM, PM-10, PM 2.5	PSD permit issued 4/28/2015
104-10	NA	Conveyor D To Fuel Bunker Drag Chain Transfer Point	90 tons/hr	Partial Enclosure	NA	PM, PM-10, PM 2.5	PSD permit issued 4/28/2015
105	NA	Cooling Tower	NA	NA	NA	NA	PSD permit issued 4/28/2015

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled*	Applicable Permit Date
106	NA	Biomass Screen and Hogging System	269 tons/hr	Total Enclosure	NA	PM, PM-10, PM 2.5	PSD permit issued 4/28/2015
107	NA	Ash Collection System	---	Water Spray	NA	PM, PM-10, PM 2.5	PSD permit issued 4/28/2015

*The Size/Rated capacities and PCD efficiencies are provided for informational purposes only, and are not applicable requirements.

III. Fuel Burning Equipment Requirements – Primary Biomass Boilers (Emission Unit ID Nos. 001 and 002)

Table III - Emission Limitations for Each Primary Biomass Boiler, Unit Ref. Nos. 001 and 002			
Regulated Pollutant	Limitation/Standard		Applicable Requirement
	lb/hr	tons/yr	
NO _x	0.135 lb/million btu on a 30-day rolling average basis		Condition 26, PSD permit issued 4/28/2015; 40 CFR 60.44b
NO _x	53.2	206.2*	Condition 26, PSD permit issued 4/28/2015
SO ₂	0.0125 lb/million btu on a 30-day rolling average basis		Condition 26, PSD permit issued 4/28/2015; 40 CFR 60.42b
SO ₂	4.9	19.1*	Condition 26, PSD permit issued 4/28/2015
Total PM10	--		Condition 26, PSD permit issued 4/28/2015
Total PM10	11.08	46.55*	Condition 26, PSD permit issued 4/28/2015
Filterable PM10	0.017 lb/million btu		Condition 26, PSD Permit Issued 4/28/2015, 40 CFR 60.43b
Filterable PM10	6.7	--	Condition 26, PSD permit Issued 4/28/2015, 40 CFR 60.43b
Total PM2.5	--		Condition 26, PSD permit issued 4/28/2015
Total PM2.5	10.55	44.31*	Condition 26, PSD permit Issued 4/28/2015
Total PM			Condition 26, PSD permit issued 4/28/2015; 40 CFR 60.43b
Total PM	12.16	51.08*	Condition 26, PSD permit issued 4/28/2015, 40 CFR 60.43b

Table III - Emission Limitations for Each Primary Biomass Boiler, Unit Ref. Nos. 001 and 002			
Regulated Pollutant	Limitation/Standard		Applicable Requirement
	lb/hr	tons/yr	
Filterable PM	0.019 lb/million btu		Condition 26, PSD Permit Issued 4/28/2015, 40 CFR 60.43b
Filterable PM	7.5	--	Condition 26, PSD permit Issued 4/28/2015, 40 CFR 60.43b
CO	0.30 lb/million btu on a 30-day rolling average basis		Condition 26, PSD permit issued 4/28/2015
CO	--	458.2*	Condition 26, PSD permit issued 4/28/2015
VOC	0.030 lb/million btu		Condition 26, PSD permit issued 4/28/2015
VOC	5.21	21.89*	Condition 26, PSD permit issued 4/28/2015
Fluorides, as HF	0.3	1.1*	Condition 26, PSD permit issued 4/28/2015
Sulfuric Acid Mist	0.90	3.78*	Condition 26, PSD permit issued 4/28/2015

(9 VAC 5-80-490, 40 CFR 60.42b, 40 CFR 60.43b and Conditions 35, and 36 PSD permit issued 5/23/2012)

- * Annual emissions of NO_x, SO₂, PM-10, PM-2.5, PM, CO, VOC, Fluorides as HF, and Sulfuric Acid Mist shall be calculated monthly as the sum of each consecutive 12-month period. (9 VAC 5-50-280)
- ** Reference Methods 6 and 7 are the preferred alternative methods during periods of malfunction of the continuous emissions monitors (CEMs) for NO_x and SO₂. Unless otherwise specified, CEMs shall be utilized for monitoring these pollutants as specified in 40 CFR 60 Subpart Db.

A. Limitations

1. This permit will supersede the permit issued on November 26, 2012 upon startup of the biomass handling system as described in the permit application. Upon the startup of the biomass handling system as described in the permit application, the permittee shall deactivate all coal handling equipment.
(9 VAC 5-80-490 B & C and Condition 3, PSD permit issued 4/28/2015)
2. Each B & W primary biomass boiler (Ref. Nos. 001, 002) shall not operate more than 8,400 hours per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-490 B & C and Condition 17, PSD permit issued 4/28/2015)
3. The maximum firing rate of the primary boilers combined shall not exceed 788 mmBTU per hour. The total heat input to the primary boilers combined shall not exceed 6,109,480 mmBTU/yr, of which no more than 305,474 mmBtu/yr is natural gas, calculated as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-490 B & C and Condition 18, PSD permit issued 4/28/2015)
4. Particulate emissions from the B & W primary biomass boilers (Ref. Nos. 001, 002) shall be controlled by an in-line multiple cyclone, a lime water injection spray dryer (dry flue gas desulfurization), and a fabric filter rated at 99.9 percent control efficiency. The control systems shall be provided with adequate access for inspection and shall be in operation when the B & W primary biomass boilers (Ref. Nos. 001, 002) are operating. The fabric filter may be by-passed during non-biomass fuel boiler start-ups and operations to alleviate potential moisture damage to the baghouse at low start-up temperatures. Bypass of the fabric filters shall not exceed 12 hours per start-up. Each fabric filter compartment shall be equipped with a device to continuously measure pressure drop.
(9 VAC 5-80-490 B & C, 40 CFR 60.43b and Condition 4, PSD Permit issued 4/28/2015)
5. Sulfur dioxide emissions from the B & W primary biomass boilers (Ref. Nos. 001, 002) shall be controlled by a lime-water injection spray dryer (a dry FGD system). The control system shall be provided with adequate access for inspection.
(9 VAC 5-80-490 B & C, 40, CFR 60.42b and Condition 15, PSD permit issued 4/28/2015)

6. The approved fuels for the B & W primary biomass boilers (Ref. Nos. 001, 002) are biomass and natural gas. Natural gas shall be fired during boiler startup, shutdown and flame stabilization. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-490 B & C, and Condition 22, PSD permit issued 4/28/2015)
7. The biomass shall meet the following specifications: biomass means those residuals that are akin to traditional cellulosic biomass including forest-derived biomass (e.g., green wood, forest thinning, clean and unadulterated bark, sawdust, trim, and tree harvesting residuals from logging and sawmill materials), wood collected from forest fire clearance activities, trees and clean wood found in disaster debris, and clean biomass from land clearing operations, each as specified in the definition of Clean Cellulosic Biomass in 40 CFR 241.2, excluding any wood which contains chemical treatments or has affixed thereto paint and/or finishing materials or paper or plastic laminates. Approved biomass is biomass that does not contain contaminants at concentrations not normally associated with virgin biomass materials.
(9 VAC 5-80-490 B & C and Condition 23, PSD permit issued 4/28/2015)
8. Visible emissions from common stack of the two primary biomass boilers shall not exceed ten (10) percent opacity except during one six (6) minute period per hour which shall not exceed twenty (20) percent opacity.
(9 VAC 5-80-490 B & C, 40 CFR 60.43b and Condition 34, PSD permit issued 4/28/2015)
9. Visible emissions from all fabric filters (except those on the primary biomass boilers) shall not exceed five (5) percent opacity.
(9 VAC 5-80-490 B & C, 9 VAC 5-50-260, 9 VAC 5-50-280 9 VAC 5-80-1705 9 VAC 5-80-1985 E and Condition 35, PSD permit issued 4/28/2015)

B. Monitoring

1. Continuous emission monitors shall be installed to measure and record opacity (at the common stack) and the concentration of SO₂, (at each boiler outlet duct), NO_x (at each boiler outlet duct) and CO₂ or O₂ (at each boiler outlet duct) emitted from the primary biomass boilers. Also, a device shall be installed to continuously measure and record the exhaust gas flow rate. They shall be maintained, located, and calibrated in accordance with approved procedures (reference to 40 CFR 60.13). A 30 day notification prior to the demonstration of the continuous monitoring system performance and subsequent notifications are to be submitted to DEQ (Director, Piedmont Regional Office).
(9 VAC 5-80-490 B & C, 40 CFR 60.13, 40 CFR 60.46b , 40 CFR 60.48b and Condition 39, PSD permit issued 4/28/2015)
2. A NO_x continuous emission monitoring system shall be installed on each primary biomass boiler. The continuous monitoring data generated by the NO_x CEMS shall be used to determine continuous compliance with the 30 day average NO_x emission standards in the Title V Permit, Condition III, Table III. Data from the NO_x CEMS shall be used to determine compliance with the emission standard on a 30 day rolling average. All of the CEM calculation, data reduction, record keeping, and

reporting requirements of NSPS Subpart Db shall apply, unless otherwise approved in writing by DEQ.

(9 VAC 5-80-490 B & C, 40 CFR 60.13, 40 CFR 60 Subpart Db and Condition 40, PSD permit issued 4/28/2015)

3. A SO₂ continuous emission monitoring system shall be installed on each primary biomass boiler to measure SO₂ at the outlet of each SO₂ control device for the purpose of measuring SO₂ emissions from the combustion of biomass. Each SO₂ CEMS shall meet the data capture requirements of NSPS Subpart Db and the quality assurance requirements of 40 CFR 60, Appendix F. All of the CEM calculation, data reduction, record keeping, and reporting requirements of NSPS Subpart Db shall apply, unless otherwise approved in writing by DEQ.

(9 VAC 5-80-490 B & C, 40 CFR 60.13, 40 CFR 60 Subpart Db and Condition 41, PSD permit issued 4/28/2015)

4. For the opacity monitors required by this permit, the continuous monitoring and quality assurance data may, at the discretion of the Board, be used as evidence of violation of the emission standards. All continuous monitors required by this permit are subject to such data capture requirements and/or quality assurance requirements as may be deemed appropriate by the Board (refer to 40 CFR 60.13 and Appendix B). For each required opacity monitor, quarterly reports of excess emissions and monitor downtime shall be submitted to DEQ (Director Piedmont Regional Office), in accordance with approved procedures (refer to 40 CFR 60.7 (c)).

(9 VAC 5-80-490 B & C, 40 CFR 60.13 and Condition 42, PSD permit issued 4/28/2015)

5. All continuous monitoring systems and monitoring devices, as may be applicable for your source type, shall be installed and operational prior to conducting performance tests under 9 VAC 5-50-30 and 9 VAC 5-60-30. Performance evaluations of the continuous monitoring system shall take place during the performance tests under 9 VAC 5-50-30 and 9 VAC 5-60-30 or within 30 days thereafter. DEQ (Director, Piedmont Regional Office) shall be furnished with two copies of the report of the performance evaluations within 60 days of the evaluation.

(9 VAC 5-80-490 E, 40 CFR 60.49b and Condition 43, PSD permit issued 4/28/2015)

6. Continuous Emission Monitoring Systems (CEMS), meeting the design specifications of 40 CFR Part 60, Appendix B Performance Specification 4A, shall be installed to measure and record the emissions of CO from each primary biomass boiler as lbs/mmBTU. The CEMs shall be installed, calibrated, maintained, audited and operated in accordance with DEQ approved procedures which are equivalent to the requirements of 40 CFR 60.13 and Appendices B and F. Data shall be reduced to 30 day rolling averages per the procedures for NO_x contained in 40 CFR 60 Subpart Db, unless approved in writing by DEQ. The monitor shall be used to demonstrate compliance with the 30-day rolling average CO emission standard (lb/mmBTU basis) as noted in the Title V permit, Condition III, Table III.

(9 VAC 5-80-490 E and Condition 44, PSD Permit issued 4/28/2015)

7. A flow monitor shall be used to measure the stack exhaust gas flow from the common stack. The stack gas flow monitor shall be installed, operated, and maintained in accordance with the provisions of 40 CFR 75 Appendices A and B,

except that non-bias and non-substituted data will be used. Heat input shall be determined at the common stack according to procedures in Part 75 and that heat input shall be apportioned to each primary boiler following the provisions of Part 75 Apportionment in Appendix F of that part to demonstrate compliance with the limitations in this permit. The permittee shall submit stack gas flow monitor reports as required by 40 CFR 75 Appendices A and B.

(9 VAC 5-80-490 E, 9 VAC 5-50-40, 9 VAC 5050-410, 9 VAC 5-80-1705, 9 VAC 5-80-1985 E and Condition 45, PSD Permit issued 4/28/2015)

8. Reserved

The following conditions: 9– 17, have been included in this Article 3 permit to implement the requirements of the CAM regulations (40 CFR 64).

9. Compliance Assurance Monitoring (CAM) - The permittee shall measure opacity using continuous opacity monitoring system (COMS) to meet the requirements of CAM for PM and PM₁₀. These units are subject to the federal New Source Performance Standard (NSPS) for electric utility steam generating units. The opacity monitoring required and the location of the monitors shall meet the requirements of 40CFR 60 Appendix B Performance Specification 1 (PS-1). Zero and span drift shall be checked daily and filter audits shall be performed in accordance with PS-1.

(9 VAC 5-80-490 and 40 CFR 64.3(b)(1))

10. Compliance Assurance Monitoring (CAM) - The permittee shall monitor, operate, calibrate and maintain the Continuous Opacity Monitoring devices as controls for particulate matter emissions from the Primary Biomass Boilers, Unit Reference Numbers 001 and 002 according to the following:

Table 1: Primary Boilers (Units 001 and 002) Compliance Assurance Monitoring Plan	
Description	Two Traveling Grate Stoker boilers fueled with biomass and/or Nat'l gas
Control Device	Baghouses
Applicable Requirement	9 VAC 5-80-1985 E, 9 VAC 5-50-280, 9 VAC 5-80-1705, 9 VAC 5-80-1180, and 9 VAC 5-50-260
Regulated Pollutant	PM, PM ₁₀ & PM _{2.5}
I. CAM Indicator	Opacity.
Measurement Approach	Continuous opacity monitor system (COMS).
Monitoring Frequency	Continuous
Justification	COMS satisfies applicable monitoring requirements and performance specifications as specified in 40 CFR 64.3, "Special criteria for the use of continuous emission, opacity or predictive monitoring systems".
II. Indicator Range	Continuous operation between 0% - 10% opacity per hour. Excursion is one six-minute period > 10% opacity.
III. Performance Criteria	Location and installation of monitors is per 40 CFR 60, Appendix B, Performance Specification 1 (PS-1).
Data Representativeness	
Verification of Operational Status	This provision of the CAM program applies to facilities that are proposing monitoring methods that are not otherwise required. Since the operation of the COMS is otherwise required, this provision is not applicable.
QA/QC Practices and Criteria	COMS was installed and evaluated in accordance with PS-1. Zero and span drift are checked daily and annual filter audits are performed in accordance with PS-1.
Data Collection Procedures	Data are collected by computerized data acquisition and handling system (DAHS). The system collects and retains all relevant opacity data.
Averaging period	Six-minute block basis.

Table 2: Primary Boilers (Units 001 and 002) Compliance Assurance Monitoring Plan	
Description	Two Spreader Stoker boilers fueled with wood and/or Nat'l gas
Control Device	Baghouses
Applicable Requirement	9 VAC 5-80-1985 E, 9 VAC 5-50-280, 9 VAC 5-80-1705, 9 VAC 5-80-1180, and 9 VAC 5-50-260
Regulated Pollutant	PM, PM ₁₀ & PM _{2.5}
I. CAM Indicator	Operational Status of Equipment
Measurement Approach	<p>Actions taken in the event an opacity excursion is observed:</p> <ul style="list-style-type: none"> ◦ Initiate a cleaning cycle for each baghouse. ◦ Monitor the opacity as the baghouses (which are dedicated to either Unit 1 or Unit 2) go through a cleaning cycle. The opacity will drop when the compartment with the problem or leaking bag goes off line to clean. ◦ Once the problem compartment is identified, the compartment is isolated and the issue resolved (e.g., replacement of bags).
Monitoring Frequency	As needed.
Justification	These actions are supplemental to the primary indicator of opacity and are taken to determine which of the two units may be causing an opacity excursion.
II. Indicator Range	Varies; these are work practices.
III. Performance Criteria	
Data Representativeness	NA. COMS satisfy 40 CFR 64.3(b).
Verification of Operational Status	Verification procedures for operation in accordance with manufacturer's recommendations, at a minimum.
QA/QC Practices and Criteria	NA
Data Collection Procedures	Events and corrective actions are logged as needed.
Averaging period	NA

Table 3: Primary Boilers (Units 001 and 002) Compliance Assurance Monitoring Plan	
Description	Two Traveling Grate Stoker boilers fueled with biomass and/or Nat'l gas
Control Device	Lime-water injection spray dryer
Applicable Requirement	9 VAC 5-80-1985 E, 9 VAC 5-50-280, 9 VAC 5-80-1705, 9 VAC 5-80-1180, and 9 VAC 5-50-260
Regulated Pollutant	PM, PM ₁₀ & PM _{2.5}
I. CAM Indicator	Exhaust Temperature
Measurement Approach	Monitor exhaust gas temperature between scrubber and baghouse
Monitoring Frequency	Continuous
Justification	The spray dryer will cool the exhaust gas temperature from a typical value prior to the spray dryer of 400°F to approximately 300°F or less at the baghouse inlet.
II. Indicator Range	Exhaust gas temperature at the baghouse inlet (15 minute average) not to exceed value based on temperatures measured during stack testing that demonstrates compliance.
III. Performance Criteria	
Data Representativeness	Location and installation of temperature monitor at inlet duct to baghouse.
Verification of Operational Status	Verification procedures, including installation, calibration, and operation in accordance with manufacturer's recommendations, at a minimum.
QA/QC Practices and Criteria	Calibrate, maintain, and operate instrumentation using procedures that are based on the manufacturer's specifications, at a minimum.
Data Collection Procedures	Data are collected by computerized data acquisition and handling system connected to the plant distributed control system. The system collects and retains all relevant temperature data.
Averaging period	One minute data values.

11. Compliance Assurance Monitoring (CAM) - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
(9 VAC 5-80-490 E (Article 3 – Acid Rain) and 40 CFR 64.6 (c))
12. Compliance Assurance Monitoring (CAM) - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
(9 VAC 5-80-490 E (Article 3 – Acid Rain) and 40 CFR 64.7 (b))
13. Compliance Assurance Monitoring (CAM) - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the Primary Biomass Boilers, Unit Reference Numbers 001 and/or 002 are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9 VAC 5-80-490 E (Article 3 – Acid Rain) and 40 CFR 64.7 (c))

14. Compliance Assurance Monitoring (CAM) - Upon detecting an excursion or exceedance, the permittee shall restore operation of the Primary Biomass Boilers, Unit Reference Numbers 001 and 002 (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.
(9 VAC 5-80-490 E (Article 3 – Acid Rain) and 40 CFR 64.7 (d)(1))
15. Compliance Assurance Monitoring (CAM) - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
(9 VAC 5-80-490 E (Article 3 – Acid Rain) and 40 CFR 64.7(d)(2))
16. Compliance Assurance Monitoring (CAM) - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Piedmont Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
(9 VAC 5-80-490 E (Article 3 – Acid Rain) and 40 CFR 64.7(e))
17. Compliance Assurance Monitoring (CAM) - If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the Primary Biomass Boilers, Unit Reference Numbers 001 and 002, for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:
 - a. Improved preventative maintenance practices;
 - b. Process operation changes;
 - c. Appropriate improvements to control methods;
 - d. Other steps appropriate to correct control performance; and

e. More frequent or improved monitoring.

(9 VAC 5-80-490 E (Article 3 – Acid Rain) and 40 CFR 64.8(a) and (b))

C. Reporting

1. For sulfur dioxide, carbon monoxide and nitrogen oxides, the following information shall be included in the quarterly excess emission reports for each 24-hour period and shall be submitted to the Director, Piedmont Regional Office:
 - a. Calendar date.
 - b. The average sulfur dioxide, carbon monoxide and nitrogen oxide emission rates (ng/J or lb/million Btu) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and, description of corrective actions taken.
 - c. Reserved
 - d. Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, malfunction (NO_x only), emergency conditions (SO₂ only), or other reasons, and justification for excluding data for reasons other than startup, shutdown, malfunction, or emergency conditions.
 - e. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
 - f. Identification of times when hourly averages have been obtained based on manual sampling methods.
 - g. Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.
 - h. Description of any modifications to the continuous monitoring system which could affect the ability of the continuous monitoring system to comply with Performance Specifications 2 or 3.
(9 VAC 5-80-490 F)
2. For each required opacity monitor, quarterly reports of excess emissions and monitor downtime shall be submitted to the Director, Piedmont Regional Office, in accordance with approved procedures (reference 40 CFR 60.7 (c)).
(9 VAC 5-80-490 F, Condition 42, PSD permit issued 4/28/2015)
3. Compliance Assurance Monitoring (CAM) Reporting - the permittee shall submit CAM reports as part of the Article 3 semi-annual monitoring reports required by General Condition C.3 of this permit to the Director Piedmont Regional Office. Such reports shall include at a minimum:
 - a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(9 VAC 5-80-490 F and 40 CFR 64.9(a))

D. Recordkeeping

- 1. Hopewell Power Station shall maintain records of all material processed in the biomass material handling system (Ref. Nos. 101A, 101B) per year. These records shall be available on site for inspection by DEQ personnel and shall be kept on file for the most recent five (5) years.
- 2. For each NO_x and SO₂ continuous emission monitor (CEM) for the primary biomass boilers (Unit Ref. Nos. 001 & 002), all of the CEM calculation, data reduction, recordkeeping, and reporting requirements of NSPS Subpart Db shall apply. All such records shall be available on site for inspection by DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-490 F and Condition 21, PSD permit issued 4/28/2015)

(9 VAC 5-80-490 E & F and Conditions 40 and 41, PSD permit issued 4/28/2015)

- 3. The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:
 - a. Continuous monitoring system calibrations and calibration checks, percent operating time, and excess emissions.
 - b. Results of all stack tests, visible emission evaluations and performance evaluations.
 - c. Monthly estimates of the mass of material processed by the ash unloading/truck loading system. The estimate shall be based upon the amount of biomass burned and/or the amount of lime sorbent used and/or a measurement of the amount of material unloaded. The assumptions and records used to estimate the emissions shall be documented and available on site for inspection by DEQ personnel. Annual estimates of material processed shall be calculated monthly as the sum of the material process for each consecutive 12 month period.
 - d. The total annual heat input to the combined primary biomass boilers. The annual total shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly total for the preceding 11 months.

- e. Records of the maximum firing rate of the combined primary biomass boiler.
- f. Throughput of biomass for the biomass handling system in tons/yr to the facility, calculated monthly as the sum of each consecutive 12 month period.
- g. Throughput of natural gas to each boiler, calculated monthly as the sum of each consecutive 12 month period.
- h. Throughput of distillate oil to each piece of equipment, calculated monthly as the sum of each consecutive 12 month period.
- i. Fuel oil certifications identifying the sulfur content of the distillate oil.
- j. Annual hours of operation for each primary biomass boiler, calculated monthly as the sum of each consecutive 12 month period.
- k. Operational records showing compliance with the Condition VI.A.1.
- l. All records required by 40 CFR 60 Subpart Db.
- m. All fuel quality analyses in accordance with Condition III.D.5.
- n. All reports required by 40 CFR 60 Subpart Db for the primary biomass boiler including , but not limited to:
 - (a) Reports of excess emission in accordance with 40 CFR 60.49b(h), and
 - (b) Reports containing the steam generating unit operating day information recorded in Condition III.D.3.p.(ii).(40 CFR 60.49b(h) and 40 CFR 60.49b(i))
- o. Any additional information required by 40 CFR 60 Subpart D for the primary biomass boiler, including but not limited to:
 - (a) Records of opacity in accordance with 40 CFR 60.49b(f), and
 - (b) Records required by 40 CFR 60.49b(g) for each steam generating unit operating day.(40 CFR 60.49b(f) and 40 CFR 60.49b(g))

These records shall be available for inspection by the DEQ and shall be current for the most recent three years.

The reporting period for the reports required under 40 CFR 60 Subpart Db is each 6 month period. Reports required by Conditions VI.A1 and III.D.5 may be submitted electronically in accordance with 40 CFR 60.49b(v)

(9 VAC 5-80-490 F, 9 VAC 5-50-50, 40 CFR 60.49b(h), 40 CFR 60.49b(i), 40 CFR 60.49b(v), and 40 CFR 60.49b(w) and Condition 47, PSD permit issued 4/28/2015)

- 4. Compliance Assurance Monitoring (CAM) Recordkeeping - The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
- (9 VAC 5-80-490 and 40 CFR 64.9)

5. The permittee shall obtain the following fuel quality data:
 - a. An analysis of the biomass heat content as fired at least once per calendar week,
 - b. An ultimate analysis of the biomass as fired at least once per calendar quarter, and
 - c. An analysis of the biomass fluoride content as fired at least once per calendar quarter.
 - d. The permittee shall submit a fuel shipment certification plan at least 60 days prior to facility startup for approval by the Piedmont Regional Office. Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in this permit.

Details of the sampling procedures shall be arranged with the Piedmont Regional Office. Records of fuel quality data shall be available on site for inspection by Department personnel and shall be kept current for the most recent five year period.

(9 VAC 5-80- 490 E & F and Condition 50, PSD permit issued 4/28/2015)

E. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. This includes constructing the facility such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing stack or duct that is free from cyclonic flow. Test ports shall be provided at the appropriate locations.

(9 VAC 5-80-490 E & F and Condition 53, PSD permit issued 4/28/2015)

2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate methods in accordance with procedures approved by the DEQ.

(9 VAC 5-80-490 E & F)

IV. Fuel Burning Equipment Requirements – Combined Primary Boilers (Emission Unit Nos. 001 and 002)

Regulated Pollutant	Limitation/Standard		Applicable Requirement
	lb/hr	tons/yr	
NO _x	-	412.4*	Condition 27, PSD permit issued 4/28/2015
SO ₂	-	38.2*	Condition 27, PSD permit issued 4/28/2015
PM ₁₀	-	93.1*	Condition 27, PSD permit issued 4/28/2015
PM	-	102.2*	Condition 27, PSD permit issued 4/28/2015
CO	-	916.4*	Condition 27, PSD permit issued 4/28/2015
VOC	-	43.8*	Condition 27, PSD permit issued 4/28/2015

These limitations are based on the primary biomass boilers operating at 8,400 hours per year. *Annual emission of NO_x, SO₂, PM-10, PM, CO, and VOC shall be calculated monthly as the sum of each consecutive 12-month period.

(9 VAC 5-80-490 B & C)

A. Limitations

1. Except as specified in this permit, the facility is to be operated in compliance with Federal requirements under 40 CFR 63, Subpart DDDDD. 40 CFR 63 Subpart DDDDD is applicable to the facility, unless the permittee obtains federally enforceable limits on its facility-wide emissions of hazardous air pollutants (HAPs) to below major-source thresholds prior to the first substantive compliance date.
(9 VAC 5-80-490 B & C, 40 CFR 63 Subpart A, and 40 CFR 63.7490 (a))

B. Monitoring

1. Compliance with the tons/year particulate (PM-10 and PM), and VOC emission limits in Table IV shall be demonstrated by the use of pollutant-specific emission factors (F-factors, AP-42 or stack test results) and records of monthly fuel throughput for the primary boilers. The permittee shall calculate annual emissions monthly as the sum of each consecutive 12-month period. The primary boiler contribution to the combined tons/year NO_x, SO₂ and CO emission limits in Table IV shall be demonstrated by the use of the primary boiler NO_x, SO₂ and CO CEMS data.
(VAC 5-80-490 E & F)

C. Recordkeeping

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:
 - a. Annual fuel throughput for each primary boiler calculated monthly as the sum of each consecutive 12-month period.
 - b. Annual combined emissions from the primary boilers (Unit Ref. Nos. 001 and 002) demonstrating compliance with the limitations in Table VI calculated monthly as the sum of each consecutive 12-month period.

These records shall be available at the facility for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50 and 9 VAC 5-80-110 and 9 VAC 5-80-490 F)

D. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports will be provided at the appropriate locations.
(9 VAC 5-80-490 E & F)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate methods in accordance with procedures approved by the DEQ.
(9 VAC 5-80-490)

V. Fuel Burning Equipment Requirements – Emergency Diesel Feed Water Pump (Unit Ref. No. 007) and Emergency Diesel Fire Water Pump (Unit Ref. No. 020)

Table V Emission Limitations for Emergency Diesel Feed Water Pump (Unit Ref. No. 007)			
Regulated Pollutant	Limitation/Standard		Applicable Requirement
	lb/hr	tons/yr	
NO _x	5.4	0.5*	Condition 28, PSD permit issued 4/28/2015

*Annual emissions of NO_x shall be calculated monthly as the sum of each consecutive 12-month period.

(9 VAC 5-80-490 B & C and Condition 28 of PSD permit issued 4/28/2015)

A. Limitations

1. Emissions from the 1.2 mmBTU/hr emergency diesel feed water pump (Unit Ref. No. 007) shall not exceed the limitations in Table V.
(9 VAC 5-80-490 B & C)

2. The 1.2 mmBTU/hr emergency diesel feed water pump (Unit Ref. No. 007) shall consume no more than 1,044 gallons of distillate oil per year calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-490 B & C and Condition 19, PSD permit issued 4/28/2015)
3. The 1.63 mmBTU/hr fire water diesel pump (Unit Ref. No. 020) shall operate no more than 500 hours per year calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-490 B & C and Condition 20, PSD permit issued 4/28/2015)
4. The approved fuel for the 1.2 mmBTU/hr emergency diesel feed water pump (Unit Ref. No. 007), and the 1.63 mmBTU/hr fire water diesel pump (Unit Ref. No. 020) is distillate oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 of the American Society for Testing and Materials. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-490 B & C and Condition 24, PSD permit issued 4/28/2015)
5. The maximum sulfur content of the distillate fuel oil to be burned in the emergency diesel feed water pump (Unit Ref. No. 007) shall not exceed 0.3 percent by weight per shipment. The maximum sulfur content of the distillate fuel oil to be burned in the 1.63 mmBTU/hr fire water diesel pump (Unit Ref. No. 020) shall not exceed 0.0015 percent by weight per shipment. The permittee shall maintain records of all distillate fuel oil shipments purchased indicating the sulfur content per shipment. These records shall be available on site for inspection by DEQ personnel and shall be kept on file for the most recent five (5) years.
(9 VAC 5-80-490 B & C and Condition 25, PSD permit issued 4/28/2015)
6. Visible emissions from the operation of the 1.2 mmBTU/hr emergency diesel feed water pump (Unit Ref. No. 007) and the 1.63 mmBTU/hr fire water diesel pump (Unit Ref. No. 020) shall not exceed ten (10) percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed twenty (20) percent opacity.
(9 VAC 5-80-490 B & C and Condition 36, PSD permit issued 4/28/2015)
7. Except where this permit is more restrictive than the applicable requirement, the 1.2 mmBTU/hr emergency diesel feed water pump (Unit Ref. No. 007) and the 1.63 mmBTU/hr fire water diesel pump (Unit ID 020) shall be operated in compliance with the MACT rules of 40 CFR Part 63 Subpart ZZZZ. The 1.63 mmBTU/hr fire water diesel pump (Unit Ref. No. 020) shall be operated in compliance with the NSPS rules of 40 CFR Part 60 Subpart IIII.
(9 VAC 5-80-490 B & C, 40 CFR 63.6595, 40 CFR 63.6603, 40 CFR 63.6612, 40 CFR 63.6625, 40 CFR 63.6640, 40 CFR 63.6645, 40 CFR 63.6650, 40 CFR 63.6655, 40 CFR 63.6665 and 40 CFR 60 Subpart IIII)

B. Monitoring

1. Emissions from the 1.2 mmBTU/hr emergency diesel feed water pump (Unit Ref. No. 007) shall not exceed the limitations specified in Table V. The permittee shall calculate annual NO_x emissions for this unit monthly as the sum of each consecutive 12-month period using monthly fuel throughput and pollutant-specific AP-42 emission factors (F-factors or AP-42) or other appropriate unit-specific factor

(manufacturer specifications). In lieu of such calculations, the permittee may elect to make a one-time demonstration of the correlation between monthly permitted fuel throughput of the units and annual emissions. In such case, compliance with the annual fuel throughput limitations for Unit Ref. No. 007 shall be deemed sufficient to demonstrate compliance with the annual NO_x limitation set forth in Tables V. The permittee shall make a one-time demonstration of maximum hourly NO_x emissions from the 1.2 mmBTU/hr emergency diesel feed water pump (Unit Ref. No. 007) using manufacturer specifications for maximum heat input (or power output) and appropriate AP-42 emission factors or manufacturer test data. The permittee shall maintain a record of this one-time demonstration of maximum hourly NO_x emissions on-site for the life of the unit.

(VAC 5-80-490 E & F)

2. At least one time per month that the units operate, an observation of the presence of visible emissions from the stacks of Unit Ref. Nos. 007 and 020 shall be made. If visible emissions are observed, the permittee shall take timely corrective action such that the units resume operation with no visible emissions or perform a visible emissions evaluation (VEE) in accordance with 40 CFR 60, Appendix A-4, Method 9 to assure visible emissions from the units do not exceed ten percent (10%) opacity. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed 10 percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the units resume operation with visible emissions of 10 percent or less. The permittee shall maintain an observation log to demonstrate compliance. The log shall include the date and the time of the observations, whether or not there were visible emissions, any VEE recordings, and any necessary corrective action.

(VAC 5-80-490 E & F and Condition 36, PSD issued 4/28/2015)

C. Recordkeeping

1. The permittee shall maintain records of the maximum sulfur content of all distillate fuel oil shipments purchased indicating the maximum sulfur content per shipment. These records shall be available on site for inspection by DEQ personnel and shall be kept on file for the most recent five (5) years.
(9 VAC 5-80-490 F and Condition 25 and 47, PSD permit issued 4/28/2015)
2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. These records shall include, but are not limited to:
 - a. Annual fuel throughput in gallons for each of the units (Unit Ref. Nos. 007 and 020) calculated monthly as the sum of each consecutive 12-month period.
 - b. All fuel supplier certifications. Vendor receipts containing the required information pertaining to low sulfur oil shall be considered certifications for the purposes of this permit.
 - c. A one-time calculation of maximum hourly NO_x emissions from the emergency diesel feed water pump (Unit Ref. No. 007) to be maintained on-site and readily accessible for inspection for the life of this unit.
 - d. Calculations of annual NO_x emissions from the emergency diesel feed water pump (Unit Ref. No. 007) calculated monthly as the sum of each consecutive 12-

month period. In lieu of monthly calculations, the permittee may elect to maintain records of a one-time demonstration of maximum annual emissions for each unit based on maximum annual permitted fuel throughput. Such records shall be maintained on-site and readily accessible for inspection for the life of each unit.

e. Any visible emissions evaluations.

These records shall be available on site for inspection by DEQ and shall be current for the most recent five years.

(VAC 5-80-490 F and Condition 47, PSD permit issued 4/28/2015)

D. Testing

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate methods in accordance with procedures approved by the DEQ.

(9 VAC 5-80-490)

VI. Process Equipment Requirements - Bed, Flyash, Lime Handling, Biomass and Ash Storage Systems (Unit Ref. Nos. 010, 012, 013, 014, 015, 016 and 017)

Table VI.A - Emission Limitations for Lime Storage and Handling Systems, Unit Ref. Nos. 010, 012, 013, 014 and 017			
Regulated Pollutant	Limitation/Standard		Applicable Requirement
	lb/hr	tons/yr	
PM	0.3*	1.2*	Condition 29, PSD permit issued 4/28/2015
PM10	0.3*	1.2*	Condition 29, PSD permit issued 4/28/2015

*These emissions are derived from the estimated overall emission contribution and are included for emission inventory purposes. Compliance shall be determined as stated in Conditions VI.A.1, 2, 5, 6, 7, 8, 9 and 10.

(9 VAC 5-80-490 B & C)

Table VI.B - Emission Limitations for the Biomass Handling System, Unit Ref. Nos. 101A, 101B, 103 and 104-4			
Regulated Pollutant	Limitation/Standard		Applicable Requirement
	lb/hr	tons/yr	
PM	0.4*	1.5*	Condition 30, PSD permit issued 4/28/2015
PM10	0.2*	0.6*	Condition 30, PSD permit issued 4/28/2015

Table VI.B - Emission Limitations for the Biomass Handling System, Unit Ref. Nos. 101A, 101B, 103 and 104-4			
Regulated Pollutant	Limitation/Standard		Applicable Requirement
	lb/hr	tons/yr	
PM2.5	0.1*	0.1*	Condition 30, PSD permit issued 4/28/2015

*These emissions are derived from the estimated overall emission contribution and are included for emission inventory purposes. Compliance shall be determined as stated in Conditions VI.A.12.
 (9 VAC 5-80-490 B & C)

Table VI.C - Emission Limitations for Ash Storage (Ash Silo), Unit Ref. No. 016			
Regulated Pollutant	Limitation/Standard		Applicable Requirement
	lb/hr	tons/yr	
PM	0.6*	2.6*	Condition 31, PSD permit issued 4/28/2015
PM10	0.6*	2.6*	Condition 31, PSD permit issued 4/28/2015

Table VI.D - Emission Limitations for Recycle Ash Storage (Recycle Ash Bin), Unit Ref. No. 015			
Regulated Pollutant	Limitation/Standard		Applicable Requirement
	lb/hr	tons/yr	
PM	0.2*	1.0*	Condition 32, PSD permit issued 4/28/2015
PM10	0.2*	1.0*	Condition 32, PSD permit issued 4/28/2015

*These emissions are derived from the estimated overall emission contribution and are included for emission inventory purposes.
 (9 VAC 5-50-260 and 9 VAC 5-80-490 B & C)

A. Limitations

1. Particulate emissions from the biomass storage silo (Ref. No. 018), the lime storage silo (Ref. No. 017), the recycle ash bin (Ref. No. 015), the discharge storage silo, and the ash handling system shall be controlled by fabric filters. The fabric filters shall be provided with adequate access for inspection.
 (9 VAC 5-80-490 B & C and Condition 5, PSD permit issued 4/28/2015)

2. Fugitive dust emissions from biomass unloading, feeding, and conveying shall be controlled by enclosure and wet suppression as necessary.
(9 VAC 5-80-490 B & C and Condition 6, PSD permit issued 4/28/2015)
3. Fugitive dust emissions from the furnace bottom ash drag shall be controlled by quenching ash with water.
(9 VAC 5-80-490 B & C and Condition 7, PSD permit issued 4/28/2015)
4. Particulate emission from the biomass screening and hogging system shall be controlled by total enclosure.
(9 VAC 5-80-490 B & C and Condition 8, PSD permit issued 4/28/2015)
5. Lime slaker emissions shall be controlled by a dust suppression aspirator and water jet spray system (venturi scrubber). The aspirator vapor discharge shall be piped to the slurry tank for complete enclosure of all dust particles produced during the slaking process. The control system shall be provided with adequate access for inspection and shall have a device for continuous measurement of temperature.
(9 VAC 5-80-490 B & C and Condition 9, PSD permit issued 4/28/2015)
6. All conveyor belt returns shall be equipped with a belt scraper system. Scrapings shall be returned in an enclosed manner to the main flow of material.
(9 VAC 5-80-490 B & C and Condition 10, PSD permit issued 4/28/2015)
7. Fugitive dust emissions from the biomass storage silo (Unit Ref. No. 018) to the B & W primary biomass boilers (Ref. Nos. 001, 002) feed hopper shall be controlled by enclosed transfer system.
(9 VAC 5-80-490 B & C and Condition 11, PSD permit issued 4/28/2015)
8. Fugitive dust emissions from the ash and flue gas desulfurization product storage silo shall be controlled by mixing the discharge with water.
(9 VAC 5-80-490 B & C and Condition 12, PSD permit issued 4/28/2015)
9. The biomass storage pile (Ref. No. 102) shall be moist.
(9 VAC 5-80-490 B & C and Condition 13, PSD permit issued 4/28/2015)
10. Fugitive dust and fugitive emission controls shall include the following, or equivalent, as approved by DEQ:
 - a. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; paving of roadways, and maintenance of roadways in a clean condition.
 - b. Open equipment for conveying or transporting materials likely to create objectionable air pollution when airborne shall be covered, or treated in an equally effective manner at all times when in motion.
 - c. Prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
 - d. Dust from material handling; and load-outs, shall be controlled by wet suppression or equivalent. The wet suppression spray systems shall be operated at optimum design.
 - e. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. These measures shall include paving the entrance/access road to the facility. Dirt, product, or raw material spilled or

tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

(9 VAC 5-80-490 B & C and Condition 14, PSD permit issued 4/28/2015)

11. Emissions from the Bed, Flyash, Lime Handling, Biomass and Ash Storage Systems (Unit Ref. Nos. 010, 012, 013 014, 015, 016 and 017) shall not exceed the limitations in Tables VI. A, B., C., and D.
(9 VAC 5-80-490 B & C)
12. The biomass material handling system (Ref. Nos. 101A, 101B) shall not process more than 784,480 tons per year of material, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-490 B & C and Condition 21, PSD permit issued 4/28/2015)
13. Visible emissions from all fabric filters (except those on the primary biomass boilers) shall not exceed five (5) percent opacity as determined by section VI B. 4 of this permit.
(9 VAC 5-80-490 B & C and Condition 35, PSD permit issued 4/28/2015 and 40 CFR 60.254(a))
14. Visible emissions from the ash unloading/truck loading system shall not exceed ten (10) percent opacity as determined by section VI B 4 of this permit
(9 VAC 5-80-490 B & C and Condition 37, PSD permit issued 4/28/2015)
15. Visible emissions from the biomass handling system shall not exceed ten (10) percent opacity as determined by section VI B 4 of this permit.
(9 VAC 5-80-490 B & C and Condition 38, PSD permit issued 4/28/2015 and 40 CFR 60.254(a))

B. Monitoring

1. Grit screen inspections to assess physical wear shall be performed every day of operation. Hopewell Power Station shall keep a daily log of all inspections.
(9 VAC 5-80-490)
2. Grit screen shall be replaced every 31 days of grit screen operation or sooner if daily inspections indicate otherwise. Hopewell Power Station shall keep a log of all grit screen replacements.
(9 VAC 5-80-490)
3. Compliance with the limitations set forth in Tables VI. A, B., C., and D shall be demonstrated by compliance with the provisions of Conditions VI.A.1 through 15 (inclusive) of this permit.
(9 VAC 5-80-490 E)
4. At least one time per week when in operation, an observation of the presence of visible emissions shall be made. If visible emissions are observed, the permittee shall take timely corrective action such that the units resume operation with no visible emissions or perform a visible emissions evaluation (VEE) in accordance with 40 CFR 60, Appendix A-4, Method 9 to assure visible emissions from the units do not exceed ten percent (10%) opacity and five percent (5%) for the fabric filters. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed 10 percent or 5 percent for the fabric filters, the VEE shall be

conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the units resume operation with visible emissions of 10 percent or less or 5 percent or less for the fabric filters. The permittee shall maintain an observation log to demonstrate compliance. The log shall include the date and the time of the observations, whether or not there were visible emissions, any VEE recordings, and any necessary corrective action.

(9 VAC 5-80-490 E and 40 CFR 60.257(a))

C. Recordkeeping

1. Hopewell Power Station shall estimate the mass of material processed by the ash unloading/truck loading system. The estimate shall be based upon the amount of biomass burned and/or the amount of lime sorbent used and/or a measurement of the amount of material unloaded. The assumptions and records used to estimate emissions shall be documented and available on site for inspection by DEQ personnel. These records shall be kept on file for the most current five (5) year period.

(9 VAC 5-80-490 F and Condition 47, PSD permit issued 4/28/2105)

2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. These records shall include, but are not limited to:
 - a. Annual throughput of material through the ash unloading/truck unloading system in tons per year calculated monthly as the sum of each consecutive 12-month period.
 - b. Performance test records in accordance with 40 CFR 60.255(a), 40 CFR 60.257, and VEE records.

(9 VAC 5-80-490 F and Condition 42, PSD permit issued 4/28/2015)

D. Testing

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate methods in accordance with procedures approved by the DEQ.

(9 VAC 5-80-490)

VII. Solvent Metal Cleaning Operations – Non-Halogenated Cold Solvent Degreaser (Emission Unit No. 019)

Note: The requirements of Conditions VII.A 1 – 5 are not applicable to aqueous based solutions.

A. Limitations

1. No owner or other person shall use or permit the use of any cold cleaner unless such cleaner is equipped with a control method that will remove, destroy or prevent the discharge into the atmosphere of at least 85% by weight of volatile organic compound emissions.

(9 VAC 5-80-490 and 9 VAC 5-40-3280 C)

2. Achievement of this emission standard in this subsection by use of the methods in 9 VAC 5-40-3290 C and D will be acceptable to the board.

(9 VAC 5-80-490 and 9 VAC 5-40-3280 C)

3. Emissions from each solvent metal cleaning operation (cold cleaning) shall be controlled as follows:
 - a. Covers or enclosed remote reservoirs shall be provided. Covers shall be designed so that they can be easily operated with one hand. (Covers for larger degreasers may require mechanical assistance, by spring loading, counterweighing or powered systems). Enclosed remote reservoirs shall be designed such that they provide reduction effectiveness equivalent to that of a cover.
 - b. External or internal drainage facilities shall be provided to collect and return the solvent to a closed container or a solvent cleaning machine. If solvent volatility is greater than 0.6 psi measured at 100°F, then the drainage facilities should be internal, so that parts are enclosed under the cover while draining. The drainage facilities may be external for applications where an internal type cannot fit into the cleaning system.
 - c. A permanent label summarizing the operating procedures in Condition VII.A.4. shall be placed in a conspicuous location on or near the degreaser.
 - d. If used, the solvent spray should be a solid, fluid stream (not a fine, atomized or shower type spray) and at a pressure which does not cause excessive splashing.

(9 VAC 5-80-490 and 9 VAC 5-40-3290 C1).
4. The permittee shall operate each solvent cleaning operation (cold cleaning) consistent with good operating practices including the following:
 - a. Waste solvent should not be disposed of or transferred to another party, such that greater than 20% of the waste (by weight) can evaporate to the atmosphere. Store waste solvent only in closed containers.
 - b. The cold cleaning unit cover should be closed whenever not handling parts in the cold cleaner
 - c. Cleaned parts should drain for at least 15 seconds or until dripping ceases.

(9 VAC 5-80-490, 9 VAC 5-40 3280 C.1 & 2, and 9 VAC 5-40-3290 C. 2)
5. The permittee shall dispose of waste solvent from the cold cleaning units by one of the following methods:
 - a. Reclamation (either by outside services or in-house)
 - b. Incineration.

(9 VAC 5-80-490, and 9 VAC 5-40-3290 D)

B. Periodic Monitoring and Recordkeeping

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:
 - a. Records documenting that each solvent metal cleaning operation (cold cleaning) at the facility are in compliance with the requirements of Conditions VII.A. & B.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years
 (9 VAC 5-80-490)

VIII. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
--	Turbine Lube Oil Reservoir	5-80-720 B.2	VOC	3,434 gallons
--	Used Oil Tank	5-80-720 C.3.	VOC	500 gallons
--	Portable Welder Engine	5-80-720 B.1.	NOx, SO ₂ , VOC, PM, PM-10, CO	0.21 mmBtu/hr
--	Oil/Water Separator (Oil Sump)	5-80-720 C.3.	VOC	280 gallons

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-490 C, E & F.

IX. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Non Applicability
9 VAC 5-40-60 (Rule 4-1)	Emission Standards for Visible Emissions and Fugitive Dust /Emissions	Units 001 & 002 are subject to opacity standards listed in Db which is more stringent than this rule.
9 VAC 5-40-900 (Rule 4-8)	Particulate Matter Standard for Fuel Burning Equipment	This standard does not apply to stationary internal combustion engines, which include the emergency diesel feed water pump and the diesel fire water pump. Units 001 & 002 are subject to NSPS Subpart Db which have more stringent particulate matter emissions limits.

Citation	Title of Citation	Description of Non Applicability
9 VAC 5-40-930 (Rule 4-8)	Sulfur Dioxide Standard for Fuel Burning Equipment	This standard does not apply to stationary internal combustion engines, which include the emergency diesel feed water pump and the diesel fire water pump. Units 001 & 002 are subject to NSPS Subpart Db and are subject to NSPS Subparts Dc, which have more stringent SO ₂ emissions limits.
40 CFR 60 Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971	Units 001 and 002 covered by Db, therefore not covered under this subpart, reference 60.40 (a)(2)(e).
40 CFR 60 Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and prior to May 19, 1978	No emissions sources at this facility are subject to these NSPS requirements.
40 CFR 60 Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and prior to July 23, 1984	This standard does not apply to the fuel oil storage tanks because it is not applicable to units storing petroleum liquids with a vapor pressure less than 1.5 pounds per square inch
40 CFR 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	This standard does not apply to the fuel oil storage tanks because it is not applicable to units storing petroleum liquids with a vapor pressure less than 1.5 pounds per square inch.

Citation	Title of Citation	Description of Non Applicability
40 CFR 60 Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing Plants	This standard does not apply because the facility does not have crushers and conveyors on site for nonmetallic mineral processing.
9 VAC 5-40-5220 (Rule 4-37)	VOC Standards for Petroleum Liquid Storage and Transfer Operations	This standard does not apply to the fuel oil storage tanks because it is not applicable to units storing petroleum liquids with a vapor pressure less than 1.5 pounds per square inch.
40 CFR 60 Subpart Y	Standards of Performance for Coal Preparation and Processing Plants	This standard does not apply because the facility has been converted to a biomass fired station; no coal on site.
40 CFR 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants: Coal-and-Oil-Fired Electric Utility Steam Generating Units	This standard does not apply to biomass units

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
 (9 VAC 5-80-500)

X. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
 (9 VAC 5-80-490 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 3, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-510.
3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-430 for a renewal permit, except in compliance with a permit issued under Article 3, Part II of 9 VAC 5 Chapter 80.
4. If an applicant submits a timely and complete application under section 9 VAC 5-80-430 for a permit renewal, but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-500, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-430 F shall cease to apply if, subsequent to the completeness determination made pursuant to section 9 VAC 5-80-430 D, the applicant fails to submit, by the deadline specified in writing by the Board, any additional information identified as being needed to process the application.
(9 VAC 5-80-430 B, C and F; 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.
- (9 VAC 5-80-490 F)

2. Records of all monitoring data and support information shall be retained for at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
(9 VAC 5-80-490 F)
3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-430 G, and shall include:
 - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
 - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
 1. Exceedance of emissions limitations or operational restrictions;
 2. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
 3. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
 - c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-490 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-430 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
2. The identification of each term or condition of the permit that is the basis of the certification.
3. The compliance status.
4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
5. Consistent with subsection 9 VAC 5-80-490 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.

6. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be emailed to EPA at R3_APO_Permits@epa.gov or sent to the following address:

Clean Air Act Title V Compliance Certification (3AP00)
U. S. Environmental Protection Agency, Region III
1650 Arch Street, Philadelphia, PA 19103-2029.
(9 VAC 5-80-490 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Piedmont Regional Office, within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition X.C.3. of this permit.
(9 VAC 5-80-490 F.2)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours, after the malfunction is discovered, notify the Director, Piedmont Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Piedmont Regional Office. All malfunctions of emission units not subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C require written reports within 14 days of the discovery of the malfunction.
(9 VAC 5-20-180 C, 9 VAC 5-40-50 and 9 VAC 5-50-50)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-490 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9 VAC 5-80-490 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-490 G.3)

J. Permit Modification

A physical change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

(9 VAC 5-80-490 G & L, 9 VAC 5-80-550 and 9 VAC 5-80-660)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.

(9 VAC 5-80-490 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-490 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-430 G.
(9 VAC 5-80-490 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-360 through 9 VAC 5-80-700 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-355. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by **April 15** of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.

(9 VAC 5-80-490 H)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

2. Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion, and,
5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E and 9 VAC 5-40-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-500 Article 3 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 3.

(9 VAC 5-80-490 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-490 K 2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-430 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-490 D.
(9 VAC 5-80-490 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9 VAC 5-80-510 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-520)
2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-560.
(9 VAC 5-80-520)
3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-560.
(9 VAC 5-80-520)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of

the malfunction.

- b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-490 F to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.
 4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.
(9 VAC 5-80-650)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 3. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-490 G & L, 9 VAC 5-80-640 and 9 VAC 5-80-660)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-430 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

Y. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

Z. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9 VAC 5-80-490 I)

AA. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- a. All terms and conditions required under 9 VAC 5-80-490, except subsection N, shall be included to determine compliance.
- b. The permit shield described in 9 VAC 5-80-500 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- c. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-360 through 9 VAC 5-80-700.

(9 VAC 5-80-490 I)

XI. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-690 concerning review of proposed permits by EPA and draft permits by affected states.

- a. Odor (9 VAC 5 Chapter 40, Article 2)
- b. State toxics rule (9 VAC 5 Chapter 60)

(9 VAC 5-80-490 N and 9 VAC 5-80-700)

XII. PHASE II ACID RAIN PERMIT Supersedes Permit ISSUED August 19, 2005

Title IV Permit Allowances and Requirements

PHASE II Permit – The attached Phase II permit is incorporated into this permit by reference. The owners and operators of the source shall comply with the standard requirements and special provisions set forth in the application
(9 VAC 5-80-440 and 9 VAC 5-80-490 A.4.a and c, B, C, E, F, M, O, and P)

A. Statutory and Regulatory Authorities

In accordance with the Air Pollution Control Law of Virginia §10.1-1308 and §10.1-1322, the Environmental Protection Agency (EPA) Final Full Approval of the Operating Permits Program (Titles IV and V) published in the Federal Register December 4, 2001, Volume 66, Number 233, Rules and Regulations, Pages 62961-62967 and effective November 30, 2001, and Title 40, the Code of Federal Regulations §§72.1 through 76.16, the

Commonwealth of Virginia Department of Environmental Quality issues this permit pursuant to 9 VAC 5 Chapter 80, Article 3 of the Virginia Regulations for the Control and Abatement of Air Pollution (Federal Operating Permit Article 3).
 (9 VAC 5-80-490 B.2)

B. SO₂ Allowance Allocations and NO_x Requirements for affected units

		2012	2013	2014	2015	2016
Unit 001	SO ₂ allowances, allocated by U. S. EPA. (tons)	None	None	None	None	None
	NO _x limit	Not Applicable.				

		2012	2013	2014	2015	2016
Unit 002	SO ₂ allowances, allocated by U. S. EPA. (tons)	None	None	None	None	None
	NO _x limit	Not Applicable.				

C. Additional Requirements, Notes:

1. Additional Requirements:

Dominion Resource Services – Hopewell Power Station, shall submit a complete permit application that includes all of the information required under 40 CFR §§72.21 and 72.31 at least 6 months, but no earlier than 18 months, prior to the date of expiration of the existing Phase II Acid Rain permit. EPA forms shall be used.
 (9 VAC 5-80-430 C.5)

2. Notes.

- a. SO₂ allowances may be acquired from other sources in addition to those allocated by U.S. EPA. No revision to this permit is necessary in order for the owners and operators of this unit to hold additional allowances recorded in accordance with 40 CFR Part 73. The owners and operators of this unit remain obligated to hold sufficient allowances to account for SO₂ emissions from this unit in accordance with 40 CFR 72.9(c)(1).
 (9 VAC 5-80-420 C.1 and H.1 and 9 VAC 5-80-490 O)

- b. These units (Units 001 and 002) were not eligible for SO₂ allowance allocation by U.S. EPA under Section 405 of the Clean Air Act and the Acid Rain Program, so none were assigned in 40 CFR Part 73, Table 2.
(9 VAC 5-80-420 C.6)
- c. The two stoker-fired boilers are not subject to NO_x emission reductions. The NO_x acid rain regulations list stoker-fired boilers as Group II boilers. However, there are no emission limitations for these types of boilers in 40 CFR 76.6.
- d. Phase II Renewal Acid Rain Permit Application Attached (Appendix A).

XIII. Cross-State Air Pollution Rule (CSAPR) Requirements

Cross State Air Pollution Rule (CSAPR)

1. **Cross State Air Pollution Rule (CSAPR)** – The permittee shall comply with all applicable cross-state air pollution rule (CSAPR) requirements (40 CFR Part 97, Subparts AAAAA – DDDDD) by the compliance date specified in 40 CFR 97, Subparts AAAAA – DDDDD, as amended.
(40 CFR Part 97, Subparts AAAAA - DDDDD and 9 VAC 5-80-110)
2. **CSAPR** – The Transport Rule (TR) subject units, and the unit-specific monitoring provisions, at this source are identified in the following table. These units are subject to the requirements for the TR NO_x Annual Trading Program (40 CFR Part 97, Subpart AAAAA), TR NO_x Ozone Season Trading Program (40 CFR Part 97, Subpart BBBB), and TR SO₂ Group 1 Trading Program (40 CFR Part 97, Subpart CCCCC).

Unit ID: Unit 1 and Unit 2					
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR Part 75, subpart B (for SO ₂ monitoring) and 40 CFR Part 75, subpart H (for NO _x monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR Part 75, appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR Part 75, Subpart E
SO ₂	X				
NO _x	X				
Heat input	X				

(40 CFR Part 97, Subpart AAAAA – CCCCC and 9 VAC 5-80-110)

3. **CSAPR** –The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.430 through 97.435 (TR NO_x Annual Trading Program), 97.530 through 97.535 (TR NO_x Ozone Season Trading Program), and 97.630 through 97.635 (TR SO₂ Group 1 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable TR trading programs.

(40 CFR Part 97, Subpart AAAAA – DDDDD and 9 VAC 5-80-110)

4. **CSAPR** –Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at:
<http://www.epa.gov/airmarkets/emissions/monitoringplans.html>.

(40 CFR Part 97, Subpart AAAAA – DDDDD and 9 VAC 5-80-110)

5. **CSAPR** –Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR part 75, subpart E and 40 CFR 75.66 and 97.435 (TR NO_x Annual Trading Program), 97.535 (TR NO_x Ozone Season Trading Program), and/or 97.635 (TR SO₂ Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at:
<http://www.epa.gov/airmarkets/emissions/petitions.html>.

(40 CFR Part 97, Subpart AAAAA – DDDDD and 9 VAC 5-80-110)

6. **CSAPR** – Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (TR NO_x Annual Trading Program), 97.530 through 97.534 (TR NO_x Ozone Season Trading Program), and/or 97.630 through 97.634 (TR SO₂ Group 1 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (TR NO_x Annual Trading Program), 97.535 (TR NO_x Ozone Season Trading Program), and/or 97.635 (TR SO₂ Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on the EPA's website at
<http://www.epa.gov/airmarkets/emissions/petitions.html>.

(40 CFR Part 97, Subpart AAAAA – DDDDD and 9 VAC 5-80-110)

7. **CSAPR** – The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (TR NO_x Annual Trading Program), 97.530 through 97.534 (TR NO_x Ozone Season Trading Program), and 97.630 through 97.634 (TR SO₂ Group 1 Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B), may be used to add or change this unit's monitoring system description.

(40 CFR Part 97, Subpart AAAAA – DDDDD and 9 VAC 5-80-110)

8. CSAPR – TR NO_x Annual Trading Program requirements (40 CFR 97.406)

a. Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.413 through 97.418.

b. Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each TR NO_x Annual source and each TR NO_x Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.431 (initial monitoring system certification and recertification procedures), 97.432 (monitoring system out-of-control periods), 97.433 (notifications concerning monitoring), 97.434 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of TR NO_x Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the TR NO_x Annual emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

c. NO_x emissions requirements.

(1) TR NO_x Annual emissions limitation.

- (a) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO_x Annual source and each TR NO_x Annual unit at the source shall hold, in the source's compliance account, TR NO_x Annual allowances available for deduction for such control period under 40 CFR 97.424(a) in an amount not less than the tons of total NO_x emissions for such control period from all TR NO_x Annual units at the source.
- (b) If total NO_x emissions during a control period in a given year from the TR NO_x Annual units at a TR NO_x Annual source are in excess of the TR NO_x Annual emissions limitation set forth in paragraph (c)(1)(a) above, then:
 - (i) The owners and operators of the source and each TR NO_x Annual unit at the source shall hold the TR NO_x Annual allowances required for deduction under 40 CFR 97.424(d); and

- (ii) The owners and operators of the source and each TR NO_x Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.

(2) TR NO_x Annual assurance provisions.

- (a) If total NO_x emissions during a control period in a given year from all TR NO_x Annual units at TR NO_x Annual sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO_x Annual allowances available for deduction for such control period under 40 CFR 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.425(b), of multiplying— (A) The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total NO_x emissions from all TR NO_x Annual units at TR NO_x Annual sources in the state for such control period exceed the state assurance level.
- (i) The owners and operators shall hold the TR NO_x Annual allowances required under paragraph (c)(2)(a) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (ii) Total NO_x emissions from all TR NO_x Annual units at TR NO_x Annual sources in the State during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the state NO_x Annual trading budget under 40 CFR 97.410(a) and the state's variability limit under 40 CFR 97.410(b).
- (iii) It shall not be a violation of 40 CFR part 97, subpart AAAAA or of the Clean Air Act if total NO_x emissions from all TR NO_x Annual units at TR NO_x Annual sources in the during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the TR NO_x Annual units at TR

NO_x Annual sources in the state during a control period exceeds the common designated representative's assurance level.

- (iv) To the extent the owners and operators fail to hold TR NO_x Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(a)(i) through (iii) above,
 - (a) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (b) Each TR NO_x Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(a) through (c) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.

(3) Compliance periods.

- (a) A TR NO_x Annual unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
- (b) A TR NO_x Annual unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance.

- (a) A TR NO_x Annual allowance held for compliance with the requirements under paragraph (c)(1)(a) above for a control period in a given year must be a TR NO_x Annual allowance that was allocated for such control period or a control period in a prior year.
- (b) A TR NO_x Annual allowance held for compliance with the requirements under paragraphs (c)(1)(b)(i) and (2)(a) through (c) above for a control period in a given year must be a TR NO_x Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowance Management System requirements. Each TR NO_x Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart AAAAA.

(6) Limited authorization. A TR NO_x Annual allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:

- (a) Such authorization shall only be used in accordance with the TR NO_x Annual Trading Program; and
 - (b) Notwithstanding any other provision of 40 CFR part 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A TR NO_x Annual allowance does not constitute a property right.
- d. Title V permit revision requirements.
 - (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO_x Annual allowances in accordance with 40 CFR part 97, subpart AAAAA.
 - (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.430 through 97.435, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.406(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).
- e. Additional recordkeeping and reporting requirements.
 - (1) Unless otherwise provided, the owners and operators of each TR NO_x Annual source and each TR NO_x Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (a) The certificate of representation under 40 CFR 97.416 for the designated representative for the source and each TR NO_x Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416 changing the designated representative.
 - (b) All emissions monitoring information, in accordance with 40 CFR part 97, subpart AAAAA.

- (c) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO_x Annual Trading Program.
- (2) The designated representative of a TR NO_x Annual source and each TR NO_x Annual unit at the source shall make all submissions required under the TR NO_x Annual Trading Program, except as provided in 40 CFR 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.
- f. Liability.
 - (1) Any provision of the TR NO_x Annual Trading Program that applies to a TR NO_x Annual source or the designated representative of a TR NO_x Annual source shall also apply to the owners and operators of such source and of the TR NO_x Annual units at the source.
 - (2) Any provision of the TR NO_x Annual Trading Program that applies to a TR NO_x Annual unit or the designated representative of a TR NO_x Annual unit shall also apply to the owners and operators of such unit.
- g. Effect on other authorities.

No provision of the TR NO_x Annual Trading Program or exemption under 40 CFR 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO_x Annual source or TR NO_x Annual unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

(40 CFR Part 97, Subpart AAAAA – DDDDD and 9 VAC 5-80-110)

9. CSAPR –TR NO_x Ozone Season Trading Program Requirements (40 CFR 97.506)

- a. Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.513 through 97.518.
- b. Emissions monitoring, reporting, and recordkeeping requirements.
 - (1) The owners and operators, and the designated representative, of each TR NO_x Ozone Season source and each TR NO_x Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.530 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.531 (initial monitoring system certification and recertification procedures), 97.532 (monitoring system out-of-control periods), 97.533 (notifications concerning monitoring), 97.534 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.535

(petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

- (2) The emissions data determined in accordance with 40 CFR 97.530 through 97.535 shall be used to calculate allocations of TR NO_x Ozone Season allowances under 40 CFR 97.511(a)(2) and (b) and 97.512 and to determine compliance with the TR NO_x Ozone Season emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.530 through 97.535 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

c. NO_x emissions requirements.

(1) TR NO_x Ozone Season emissions limitation.

- (a) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO_x Ozone Season source and each TR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, TR NO_x Ozone Season allowances available for deduction for such control period under 40 CFR 97.524(a) in an amount not less than the tons of total NO_x emissions for such control period from all TR NO_x Ozone Season units at the source.
- (b) If total NO_x emissions during a control period in a given year from the TR NO_x Ozone Season units at a TR NO_x Ozone Season source are in excess of the TR NO_x Ozone Season emissions limitation set forth in paragraph (c)(1)(a) above, then:
 - (i) The owners and operators of the source and each TR NO_x Ozone Season unit at the source shall hold the TR NO_x Ozone Season allowances required for deduction under 40 CFR 97.524(d); and
 - (ii) The owners and operators of the source and each TR NO_x Ozone Season unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart BBBBBB and the Clean Air Act.

(2) TR NO_x Ozone Season assurance provisions.

- (a) If total NO_x emissions during a control period in a given year from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period,

shall hold (in the assurance account established for the owners and operators of such group) TR NO_x Ozone Season allowances available for deduction for such control period under 40 CFR 97.525(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.525(b), of multiplying—

- (i) The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and
 - (ii) The amount by which total NO_x emissions from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state for such control period exceed the state assurance level.
- (b) The owners and operators shall hold the TR NO_x Ozone Season allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (c) Total NO_x emissions from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the State NO_x Ozone Season trading budget under 40 CFR 97.510(a) and the state's variability limit under 40 CFR 97.510(b).
- (d) It shall not be a violation of 40 CFR part 97, subpart BBBBBB or of the Clean Air Act if total NO_x emissions from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state during a control period exceeds the common designated representative's assurance level.
- (e) To the extent the owners and operators fail to hold TR NO_x Ozone Season allowances for a control period in a given year in accordance with paragraphs (c)(2)(a) through (c) above,
- (i) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (ii) Each TR NO_x Ozone Season allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(a) through (c) above and each day of such control

period shall constitute a separate violation of 40 CFR part 97, subpart BBBB and the Clean Air Act.

(3) Compliance periods.

- (a) A TR NO_x Ozone Season unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.
- (b) A TR NO_x Ozone Season unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance.

- (a) A TR NO_x Ozone Season allowance held for compliance with the requirements under paragraph (c)(1)(a) above for a control period in a given year must be a TR NO_x Ozone Season allowance that was allocated for such control period or a control period in a prior year.
- (b) A TR NO_x Ozone Season allowance held for compliance with the requirements under paragraphs (c)(1)(b)(i) and (2)(a) through (c) above for a control period in a given year must be a TR NO_x Ozone Season allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowance Management System requirements. Each TR NO_x Ozone Season allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart BBBB.

(6) Limited authorization. A TR NO_x Ozone Season allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:

- (a) Such authorization shall only be used in accordance with the TR NO_x Ozone Season Trading Program; and
- (b) Notwithstanding any other provision of 40 CFR part 97, subpart BBBB, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

- (7) Property right. A TR NO_x Ozone Season allowance does not constitute a property right.
- d. Title V permit revision requirements.
- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO_x Ozone Season allowances in accordance with 40 CFR part 97, subpart BBBB.
- (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.530 through 97.535, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.506(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).
- e. Additional recordkeeping and reporting requirements.
- (1) Unless otherwise provided, the owners and operators of each TR NO_x Ozone Season source and each TR NO_x Ozone Season unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
- (a) The certificate of representation under 40 CFR 97.516 for the designated representative for the source and each TR NO_x Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.516 changing the designated representative.
- (b) All emissions monitoring information, in accordance with 40 CFR part 97, subpart BBBB.
- (c) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO_x Ozone Season Trading Program.
- (2) The designated representative of a TR NO_x Ozone Season source and each TR NO_x Ozone Season unit at the source shall make all submissions required under the TR NO_x Ozone Season Trading Program, except as provided in 40 CFR 97.518. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

f. Liability.

- (1) Any provision of the TR NO_x Ozone Season Trading Program that applies to a TR NO_x Ozone Season source or the designated representative of a TR NO_x Ozone Season source shall also apply to the owners and operators of such source and of the TR NO_x Ozone Season units at the source.
- (2) Any provision of the TR NO_x Ozone Season Trading Program that applies to a TR NO_x Ozone Season unit or the designated representative of a TR NO_x Ozone Season unit shall also apply to the owners and operators of such unit.

g. Effect on other authorities.

No provision of the TR NO_x Ozone Season Trading Program or exemption under 40 CFR 97.505 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO_x Ozone Season source or TR NO_x Ozone Season unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

(40 CFR Part 97, Subpart AAAAA – DDDDD and 9 VAC 5-80-110)

10. CSAPR - TR SO₂ Group 1 Trading Program requirements (40 CFR 97.606) –

a. Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.613 through 97.618.

b. Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each TR SO₂ Group 1 source and each TR SO₂ Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.631 (initial monitoring system certification and recertification procedures), 97.632 (monitoring system out-of-control periods), 97.633 (notifications concerning monitoring), 97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of TR SO₂ Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the TR SO₂ Group 1 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

c. SO₂ emissions requirements.

(1) TR SO₂ Group 1 emissions limitation.

- (a) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR SO₂ Group 1 source and each TR SO₂ Group 1 unit at the source shall hold, in the source's compliance account, TR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) in an amount not less than the tons of total SO₂ emissions for such control period from all TR SO₂ Group 1 units at the source.
- (b) If total SO₂ emissions during a control period in a given year from the TR SO₂ Group 1 units at a TR SO₂ Group 1 source are in excess of the TR SO₂ Group 1 emissions limitation set forth in paragraph (c)(1)(a) above, then:
 - (i) The owners and operators of the source and each TR SO₂ Group 1 unit at the source shall hold the TR SO₂ Group 1 allowances required for deduction under 40 CFR 97.624(d); and
 - (ii) The owners and operators of the source and each TR SO₂ Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR part 97, subpart CCCCC and the Clean Air Act.

(b) TR SO₂ Group 1 assurance provisions.

- (a) If total SO₂ emissions during a control period in a given year from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO₂ emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying—
 - (i) The quotient of the amount by which the common designated representative's share of such SO₂ emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such SO₂ emissions exceeds the respective common designated representative's assurance level; and

- (ii) The amount by which total SO₂ emissions from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state for such control period exceed the state assurance level.
 - (b) The owners and operators shall hold the TR SO₂ Group 1 allowances required under paragraph (c)(2)(a) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
 - (c) Total SO₂ emissions from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state during a control period in a given year exceed the state assurance level if such total SO₂ emissions exceed the sum, for such control period, of the state SO₂ Group 1 trading budget under 40 CFR 97.610(a) and the state's variability limit under 40 CFR 97.610(b).
 - (d) It shall not be a violation of 40 CFR part 97, subpart CCCCC or of the Clean Air Act if total SO₂ emissions from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total SO₂ emissions from the TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state during a control period exceeds the common designated representative's assurance level.
 - (e) To the extent the owners and operators fail to hold TR SO₂ Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(a) through (c) above,
 - (i) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (ii) Each TR SO₂ Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(a) through (c) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart CCCCC and the Clean Air Act.
- (3) Compliance periods.
- (a) A TR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
 - (b) A TR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.

- (4) Vintage of allowances held for compliance.
 - (a) A TR SO₂ Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(a) above for a control period in a given year must be a TR SO₂ Group 1 allowance that was allocated for such control period or a control period in a prior year.
 - (b) A TR SO₂ Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(b)(i) and (2)(a) through (c) above for a control period in a given year must be a TR SO₂ Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
 - (5) Allowance Management System requirements. Each TR SO₂ Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart CCCCC.
 - (6) Limited authorization. A TR SO₂ Group 1 allowance is a limited authorization to emit one ton of SO₂ during the control period in one year. Such authorization is limited in its use and duration as follows:
 - (a) Such authorization shall only be used in accordance with the TR SO₂ Group 1 Trading Program; and
 - (b) Notwithstanding any other provision of 40 CFR part 97, subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
 - (7) Property right. A TR SO₂ Group 1 allowance does not constitute a property right.
- d. Title V permit revision requirements.
- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR SO₂ Group 1 allowances in accordance with 40 CFR part 97, subpart CCCCC.
 - (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.630 through 97.635, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR part 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.606(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

e. Additional recordkeeping and reporting requirements.

(1) Unless otherwise provided, the owners and operators of each TR SO₂ Group 1 source and each TR SO₂ Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of five years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

(a) The certificate of representation under 40 CFR 97.616 for the designated representative for the source and each TR SO₂ Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.616 changing the designated representative.

(b) All emissions monitoring information, in accordance with 40 CFR part 97, subpart CCCCC.

(c) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR SO₂ Group 1 Trading Program.

(2) The designated representative of a TR SO₂ Group 1 source and each TR SO₂ Group 1 unit at the source shall make all submissions required under the TR SO₂ Group 1 Trading Program, except as provided in 40 CFR 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

f. Liability.

(1) Any provision of the TR SO₂ Group 1 Trading Program that applies to a TR SO₂ Group 1 source or the designated representative of a TR SO₂ Group 1 source shall also apply to the owners and operators of such source and of the TR SO₂ Group 1 units at the source.

(2) Any provision of the TR SO₂ Group 1 Trading Program that applies to a TR SO₂ Group 1 unit or the designated representative of a TR SO₂ Group 1 unit shall also apply to the owners and operators of such unit.

g. Effect on other authorities.

No provision of the TR SO₂ Group 1 Trading Program or exemption under 40 CFR 97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR SO₂ Group 1 source or TR SO₂ Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

(40 CFR Part 97, Subpart AAAAA – CCCCC and 9 VAC 5-80-110)